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Dog Tips

Immunoglobulin A Deficiency: A Hidden Source of Chronic Skin Allergies and Infections That Few Vets Detect

This condition is rarely tested for or diagnosed, but it can cause havoc for both you and your pet. If your pet is plagued by stubborn, chronic itching and nothing seems to help, seek out a holistic veterinarian who is willing to look much further than skin deep.

Analysis by Dr. Karen Shaw Becker

STORY AT-A-GLANCE

- Violet is a 7 year-old Yorkie who has been plagued by skin allergies and infections for most of her life. Dr. Becker met Violet in 2007 when she was just a year old, and the little dog had already endured multiple rounds of steroids and antibiotics that ultimately only made her condition worse
- Dr. Becker prescribed an initial healing protocol for Violet, but suspected her substantial sensitivity issues at such a young age pointed to an inherited condition. And indeed, Violet's skin and ear infections continued to recur intermittently
- Dr. Becker suspected Violet had an immunoglobulin A (IgA) deficiency, and lab tests confirmed her suspicions. Adequate IgA levels are necessary to prevent inflammation and infection of the skin and the respiratory, digestive, reproductive and urinary tracts
- Dr. Becker put Violet on a new protocol and continued trying different supplements until she found one that caused a dramatic improvement in Violet's IgA level
- Selective immunoglobulin A deficiency, while recognized in veterinary medicine, is infrequently tested for or diagnosed. If your pet is chronically sick, look for a vet who will search for answers with you. Don't assume or let anyone tell you that an animal with an inherited disorder or compromised immune system can't be helped

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I met little Violet, a Yorkshire Terrier, in April 2007 when she was just over a year old. Poor Violet was itchy from head to toe and also had yeasty ears, a common malady of allergic dogs.

Violet has Chronically Itchy Skin, Recurrent Bacterial Infections and Seborrhea Oleosa

Atopy (a genetic predisposition toward allergic sensitivity) and chronic itching are common reasons pet owners like Violet's mom seek out integrative veterinarians. She had taken Violet to several traditional vets, and she was already frustrated with the typical vicious cycle of prescribed steroids … followed by a secondary skin infection … followed by prescribed antibiotics … followed by a secondary yeast infection. She had watched Violet go through this cycle multiple times (**page 1**), and the dog was just a year old.

Violet also had seborrhea oleosa, a greasy skin condition that exacerbated her allergic response. I likened her oily coat to her being an "environmental Swiffer," collecting a tremendous load of environmental allergens, from dust mites to pollens.

Violet's environmental allergy panel was negative (**page 2**), which is not an uncommon finding when young dogs are tested. I also informed Violet's mom that she could be having reactions to the thousands of allergens not listed on the panel, or a food sensitivity that is difficult to test for. (This was before **www.nutriscan.org** testing was available!)

Violet's Significant Allergic Condition at Such a Young Age Signals Genetic Inheritance

We started Violet on a novel protein diet, choosing a protein and veggie source she had not consumed before. I prescribed Moducare, a sterol/sterolin complex which helps to rebalance the immune system, the herb Cat's Claw (Saventaro), much more frequent baths, and patience.

I am convinced there is a genetic predisposition to multiple sensitivities when very young animals have such significant allergic reactions. Nothing will cure the DNA these dogs are born with; the goal is to help their bodies decrease expression of genetic predispositions by modifying environmental conditions and diet, or nutrigenomics.

Over time, Violet's itch lessened and her oily coat was controlled through lots of degreasing baths, but outbreaks of infected ears and skin persisted. I switched her supplement protocol several times, but she continued having intermittent infections.

Violet's Persistent Skin and Ear Infections Suggest an Immunoglobulin A Deficiency

I frankly love how an animal's body announces there's still a problem by displaying stubborn symptoms – in Violet's case, bacterial infections. My approach to recurrent symptoms is this: if the patient is stable we will try three very different protocols before diving into diagnostics. If there is no improvement or the patient's quality of life diminishes, additional testing is warranted.

In Violet's case we tried nutraceuticals, homeopathics and a variety of Chinese herbs without dramatic improvement in her skin infections (improvement tells us we're "barking up the right tree"). Violet was on a series of great supplements to help her body maintain healthy skin, and yet she continued to acquire infections.

I suggested that Violet's IgA levels may be low, which would cause her skin defenses to be weakened and more prone to infection. I recommended we start our diagnostic testing with an immunoglobulin panel to see if her immune system was functioning optimally.

Bingo! Violet was Immunoglobulin A (IgA) deficient (**page 3**). IgA is an immunoglobulin, or antibody, that is critical for healthy skin, including mucosal surfaces (the mouth, GI, urinary and reproductive tracts).

IgA Is Essential for the Health of the Skin and the Respiratory, Digestive, Reproductive and Urinary Tracts

There are two types of IgA. Type 1 (non-secretory) is found in blood, and type 2 (secretory) which is secreted onto mucosal surfaces. Secretory IgA is absolutely critical for a resilient and healthy gut. Without adequate IgA secretion into the GI tract, the intestines become dysbiotic, resulting in leaky gut syndrome, which allows antigens into the bloodstream and fosters systemic allergic reactions.

This amazing antibody that protects the body's surfaces contains a glycoprotein that prevents it from being digested in the GI tract. These microscopic warriors bind antigens and pathogens and prevent them from adhering to the epithelium (skin), thereby preventing inflammation and infection of skin and in the respiratory, digestive, reproductive, and urinary tracts.

When these antibodies are not produced in adequate numbers, these parts of the body are prone to recurrent infections (viral, bacterial and fungal) and inflammatory reactions (including allergic and auto-immune responses).

I use the Veterinary Diagnostic Laboratories at Colorado State University to run my immunoglobulin panels. A normal IgA range is between 40-160. Violet's initial levels were 35.

Based on Her IgA Deficiency, Violet's Healing Protocol Is Adjusted

I started Violet on several supplements to improve GI defenses and overall immune health, including probiotics, enzymes and IgG 2000 DF. Violet's mom happens to own a great company called **Cocotherapy**, so Violet was already getting coconut oil, an excellent dietary addition for any immune-compromised animal because of its high lauric acid content.

I explained to Violet's mom that there isn't a cure for her genetic flaw, so the goal is to help bolster her IgA production through supplementation.

There are many viable options that benefit IgA deficient animals, and each animal responds differently to each supplement. Some animals respond immediately, and sometimes it takes a half dozen attempts to see improvement. Many animals need supplemental thyroid support, adrenal support and sex hormone balancing, as well.

Violet's mom was committed to working with me over the next several years to try and improve her dog's immunologic health. Most importantly, supplementation must be continued throughout Violet's life. Stopping support will result in a relapse back into an immuno-compromised state, opening up the body to all sorts of infections and degenerative diseases. Immunoglobulin deficiency is inherited, and while there is no cure, the condition can be managed to help reduce the number of recurrent infections and inflammatory reactions.

We Continue to Adjust Violet's Supplements Until Her IgA Levels Improve Dramatically

Violet's follow up IgA level was 46 (**page 4**). Improved, but not by much, so I switched her to a product called **IAG** and then to Colostrum Immune Formula following another not-so-impressive test result (**page 5**). Her levels improved on this supplement (**page 6**) but within the year, dropped back down again (**page 7**). So I switched Violet to **Cytozyme-THY**, a thymus glandular, and finally … success! Violet's IgA levels moved into the above normal range (**page 8**).

Even better than the improved test results was Violet's visibly healthier body; she has been skin infection-free for over 9 months! We reduced her dose of the glandular by 50 percent as a maintenance dose, and will be rechecking her levels this fall. So far, so good!

Does Your Pet, Like Violet, Have "Selective Immunoglobulin A Deficiency?"

"Selective Immunoglobulin A deficiency" is a condition that is recognized in veterinary medicine (see study abstract **here**), but I think it is grossly under-tested for, and therefore under-diagnosed.

Sadly, most vet schools are still educating vets to be reactive – to treat infections as they present, rather than question why the infection occurred or what can be done to prevent it from happening again. When pets are recurrently sick, something is wrong. At some point, after a dozen rounds of the most effective antibiotic (based on a culture and sensitivity test), the vet or pet owner should begin asking "why isn't my patient/pet responding?"

And yet, most veterinarians have never heard of immunoglobulin testing. And I've even worked with a few vets that believe "it's just the compromised immune system the dog was born with, there's nothing I can do to help."

If you have a pet that is recurrently sick, I hope Violet's story will encourage you to find a vet that digs for answers with you. You may spend most your pet's life working to help her feel better, but really, what other option is there than to continue searching for answers for a pet that continues to have symptoms?